RE: <u>Petition to withdraw holding of abandonment</u> for Patent 09/916,701, "Method for Shifting the Bandgap Energy of A Quantum Well Layer"

### Dear Sir/Madam:

I called the paralegal of your "Office for Petition Examiner" and spoke to Mr. Tom Hawkins (703-305-8380) and he advised me to send you our document with respect to the above matter. Please process the enclosed document (total 26 pages).

We have been awaiting the award of the above patent that had been allowed on March14, 2003. The patent office probably mistakenly abandoned the patent on ground that it did not receive our final set of drawings (See attached Document page 6) while we had actually sent them on time.

A petition to "withdraw holding of abandonment" was sent to the patent office to correct the error. This was sent by our patent lawyer Alan Limbach of Gray Cary on 9 September 03 (page 1 of enclosed Document) with the enclosure of a return postcard and document to show our timely mailing date of 22 July 03 (page 8 of enclosed Document). The letter showed our timely submittal and possible Patent Office error.

We have not heard from the Patent Office since and are eager to see the award of the patent. Please let me know if the patent will be awarded soon. In case there is any question, I can be contacted at 224-588-0958 (cell) or my assistant Dr. Jing Ma at 847-208-3918 at any time. Thanks.

Best regards,

Seng-Tiong Ho

120 Picardy Lane Wheeling, IL 60090 224-588-0958

3 July 04



Atty Dckt Number: 2103248-990140

**PATENT** 

Date: 9/9/03

- 1 -

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

BOON-SIEW OOI et al.

Application No. 09/916,701

Filed: July 26, 2001

For: METHOD OF SHIFTING THE

BANDGAP ENERGY OF A QUANTUM

WELL LAYER

Group Art Unit: 2812

Examiner: SAVITRI MULPURI

PETITION TO WITHDRAW HOLDING OF ABANDONMENT

2000 University Avenue,

East Palo Alto, CA 94303-2248

(650) 833-2000

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to MS Issue Fee, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22213-1450, on

September 9, 2003.

GRAY CARY WARE & FREIDENRICH

Linda West

Commissioner for Patents PO Box 1450 Mail Stop: Issue Fee Alexandria, VA 22313-1450

Sir:

Applicants hereby petition to withdraw the holding of abandonment in the present application, as evidenced in the Notice of Abandonment mailed September 2, 2003 (copy submitted herewith).

According to the Notice of Abandonment, the present application was abandoned due to Applicants' alleged failure to timely file new formal drawings as required in the Notice of Allowability, namely that no new formal drawings were received.

Applicants submit that new formal drawings were indeed timely submitted in the present case. Submitted herewith is a true and correct copy of Applicant's response to the Notice of Allowance, which included:

- 1. Transmittal Form
- 2. PTOL 85B Fee Transmittal





Atty Dckt Number: 2103248-990140

PATENT

- 2 -

- 3. Fee Transmittal.
- 4. Submission of Formal Drawings transmittal.
- 5. 13 Sheets of Formal Drawings.
- 6. Check for \$950.
- 7. Certificate of First Class Mailing
- 8. Return Postcard.

Also submitted herewith is a true and correct copy of the stamped postcard receipt, which is prima facie evidence under MPEP 503 of receipt in the USPTO of all items listed thereon, including the 13 sheets of formal drawings.

Therefore, it is respectfully requested that the abandonment of the present application be withdrawn.

Respectfully submitted,

**GRAY CARY WARE & FREIDENRICH** 

Dated: 547. 9, 2003

By: \_

Alan A. Limbach Reg. No. 39,749

Attorneys for Applicant(s)

TELEPHONE: (650) 833-2433 (direct line)

TELECOPY: (650) 833-2001

Gray Cary\EM\7149888.I 2103248-990140





AAL



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address COMMISSIONER FOR PATENTS
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/916,701	07/26/2001	Boon-Siew Ooi	021040-000800US	9267
26379 7	590 09/02/2003			
GRAY CARY	Y WARE & FREIDEN	RICH LLP	EXAM	INER
	SITY AVENUE O, CA 94303-2248		MULPURI	, SAVITRI
			ART UNIT	PAPER NUMBER
			2812	PH12
			DATE MAILED: 09/02/2001	3

Please find below and/or attached an Office communication concerning this application or proceeding.

# COCKETED

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Gray Cany .... - 7 & Freidenrich Mail Stop Issue Fee Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

Docket No. 2103248-990140 2003

### Enclosed are:

- Transmittal Cover Sheet;
- Petition to Withdraw Holding on Abandonment with Attachments; and
- . 3) Return postcard.

. 2103248-990140 Phosistor Technologies

AAL/Imw

Mail Stop Issue Fee Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

Mailed: September 9.2003 U.S. Serial No. 09/916.701 Filed July 26, 2001 Docket No. 2103248-990

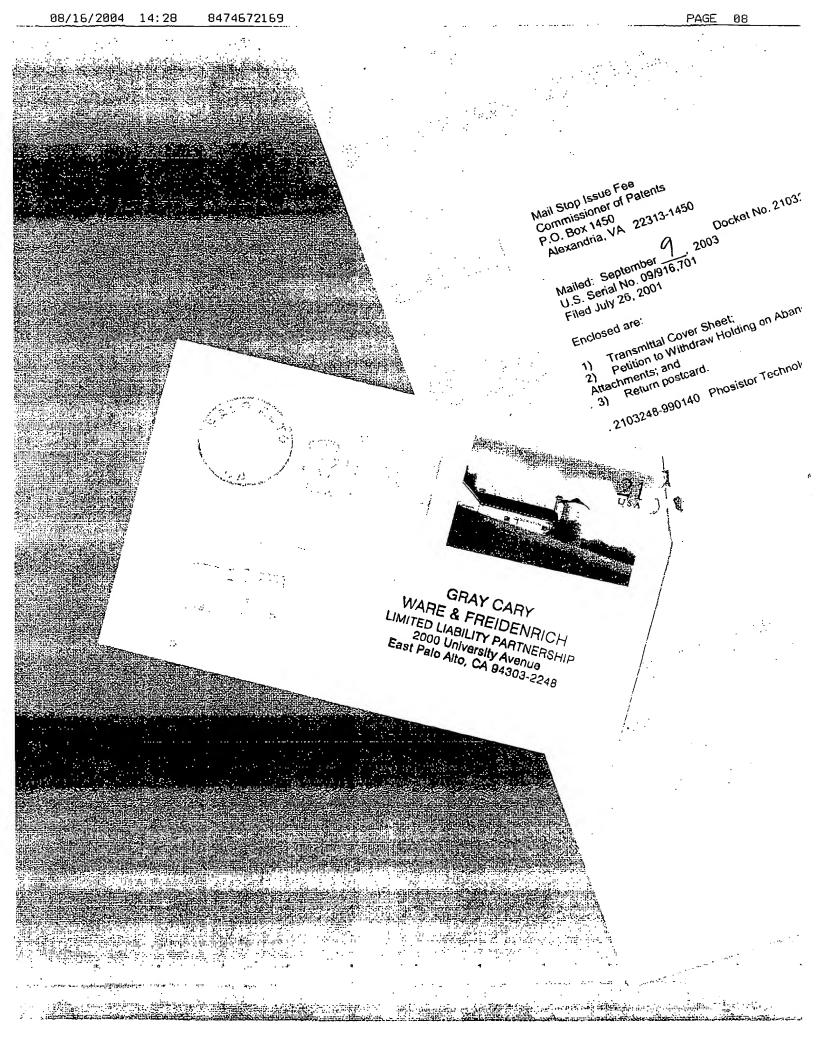
## Enclosed are:

Transmittal Cover Sheet;

Petition to Withdraw Holding on Abandonment with ADE Attachments; and Return postcard.

. 2103248-990140 Phosistor Technologies

AAL/Imw



Please type a plus sign (+) inside this box



PTO/SB/21 (08-00)

		Application Number		09/916,701		
TRANSMITTA		Filing Date		July 26, 2001		
FORM	<b>`</b>	First Named Invent	tor	Boon-Siew Ooi et al.		
(to be used for all correspondence a	fter initial filing)	Group Art Unit		2812		
		Examiner Name		Savitri Mulpuri		
Total Number of Pages In This Subm	ission	Attorney Docket N	umber	2103248-990140		
	NOLOGUES (shoo	to all that apply)				
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Fee Transmittel Form	/for an Andination		_	Group		
Fee attached	Drawing(s)	·	of.	Appeals and Interferences		
Amendment/Reply	Licensing-relate	ed Papers	LI Ap	peal Communication to Group opeal Notice, Brief, Reply Brief)		
After Final	Petition to Con- Application	vert to a Provisional	Pr	oprietary Information		
Affidavits/declaration(s)		ney, Revocation respondence Address	☐ St	atus Letter		
Extension of Time Request	Terminal Discle	aimer	<b>^</b> (p)	ther Enclosure(s) lease identify below):		
Express Abandonment Request	Request for Re	fund		atition to Withdraw Holding of bandonment		
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	Remarks					
Certified Copy of Priority Document(s)						
Response to Missing Parts/ Incomplete Application						
Response to Missing Parts under 37 CFR 1.52 or 1.53						
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Dated: September 9, 2003	Ву:	Attorney Name	Alan A. Li	mbash		
		Reg. No. 39,7	749	mb8G1		
Attorneys for Applicant(s)						
	CERTIFICATE O	F MAILING	<u> </u>	•		
i hereby certify that this correspondence is be	I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail					
In an envelope addressed to: Commissioner- date: September 2003	of Patents and Trademark	s, Box 1450, Alexandria	.VA on t	this		
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Typed or printed name Linda Murphy	NA NA TI	) A T 1 5	ate	Contember 0, 2002		
Signature / / An C		4/d/\	aia	September 9, 2003		

Gray Cary\EM\7149934.1 / 2103248-990140

Gray Cary\EM\7149934.1 2103248-990140







# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

	EXA	MINER
<u> </u>	ART UNIT	PAPER NUMBER

DATE MAILED:

#### NOTICE OF ARANDONMENT

		MOTICE OF ADAMBORINE.	
This	app	olication is abandoned in view of:	,
	App	olicant's failure to timely file a proper response to the Office letter mailed on	•
		A response (with a Certificate of Mailing or Transmission of)  which is after the expiration of the period for response (including of)  which expired on	was received on ding a total extension of
		A proposed response was received on, but it does not constitut rejection.	te a proper response to the final
		(A proper response to a final rejection consists only of: a timely filed amendment whi condition for allowance; a Notice of Appeal; or the filing of a continuing application un	ich places the application in nder 37 CFR 1.62 (FWC).
		No response has been received.	
		plicant's failure to timely pay the required issue fee within the statutory period of three he Notice of Allowance.	months from the mailing date
		The issue fee (with a Certificate of Mailing or Transmission of) w	vas received on
		The submitted Issue fee of \$is insufficient. The issue fee required by 37 (	CFR 1.18 is \$
		The issue fee has not been received.	
P	Αр	plicant's failure to timely file new formal drawings as required in the Notice of Allowabl	ility.
′		Proposed new formal drawings (with a Certificate of Mailing or Transmission of received on	) were
		The proposed new formal drawings filed are not acceptable.	•
	X	No proposed new formal drawings have been received.	
	4	ne express abandonment under 37 CFR 1.62(g) in favor of the FWC application filed o	on
		ne letter of express abandonment which is signed by the attorney or agent of record, the terest, or all of the applicants.	he assignee of the entire
		ne letter of express abandonment which is signed by an attorney or agent (acting in a 7 CFR 1.34(a) upon the filing of a continuing application.	representative capacity under
		ne decision by the Board of Patent Appeals and Interferences rendered on r seeking court review of the decision has expired and there are no allowed claims.	
	T	ne reason(s) below:	ABANDONMENT CONTACT PERSON IS:
FOR	M P1	O-1432 (REV. 10-95)	TOM HAWKINS 305-8380





## Respond to the Notice of Abandonment by one of the following:

## Petition To Withdraw Holding of Abandonment (See MPEP 711.03(c) I) and 37 CFR § 1.181) No fee required

Where an applicant contends that the application is not in fact abandoned (e.g., there is disagreement as to the sufficiency of the reply, or as to controlling dates), a petition under 37 CFR § 1.181(a) requesting withdrawal of the holding of abandonment is the appropriate course of action. Any petition under 37 CFR § 1.181, to withdraw the holding of abandonment not filed within 2 months of the mail date of a Notice of Abandonment may be dismissed as untimely under 37 CFR § 1.181(f).

In order for a petition to be granted, the evidence must be sufficient according to one of the following standards:

- 37 CFR § 1.8(b) Certificate of Mailing
- 37 CFR § 1.10 "Express Mail" mailing
- MPEP 503 Postcard Receipt as Prima Facie Evidence

Petition To Withdraw Holding Of Abandonment should be addressed as follows:

By mail:

Commissioner For Patents, P.O. Box 1450, Mail Stop: Issue Fee, Alexandria, VA

22313-1450

By facsimile:

703-305-8755 or 703-305-4372

## Petition To Withdraw Holding Of Abandonment Based On Failure To Receive Office Action (See MPEP 711.03(c) II). No fee required

Where an applicant contends that the original Notice of Allowance and Issue Fee Due was never received. If adequately supported, the Office may grant the petition and remail the Office action. The showing required establishing non-receipt of an Office communication must include a statement from the practitioner stating that the Office communication was not received and attesting to the fact that a search of the file jacket and docket records indicates that the Office communication was not received. A copy of the docket record where the nonreceived Office would have been entered had it been received and docketed must be attached to and referenced in practitioner's statement.

Petition should be addressed to the Technology Center handling the application as follows:

By mail:

Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450

(Mark attention of a particular office or individual)

By facsimile:

Technology Center numbers posted at http://www.uspto.gov/september1/faxnotice.htm

## Petition To Revive An Abandoned Application (See MPEP 711.03(c) 111)

Where there is no dispute as to whether an application is abandoned (e.g. the applicant's contentions merely involve the cause of abandonment) a petition under 37 CFR § 1.137 (a) unavoidable or (b) unintentionally (accompanied by the appropriate petition fee) is necessary to revive the abandoned application.

Petitions under 37 CFR § 1.137 should be addressed to the Office of Petitions as follows:

By mail:

Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450

By hand:

Crystal Plaza 4, Rm. 3C23, 2201 Clark Place, Arlington, VA

By facsimile:

703-308-6916

Petition For Revival Of An Application For Patent Abandoned Unavoidably Under 37 CFR § 1.137(a) and Unintentionally Under 37 CFR 1.137(b), forms available at USPTO website – http://www.uspto.gov

Note: Abandonment takes place by operation of law for failure to reply to an Office action or timely pay the issue fee, not by operation of the mailing of a Notice of Abandonment.

TRANSMITTAL

**FORM** 





09/916,701

July 26, 2001

PTO/SB/05 (05-03)

Approved for use through 04/30/2003. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Application Number** 

Filing Date

FORM			First Named Inventor	Boon Siew Ooi		
(to be used for a	l correspondence after initial f	Шng)	Art Unit	2812		
			Examiner	Savitr	Mulpuri	
Total Number of P	Pages In This Submission	21	Attorney Docket Number	2103248-990140		
		ENC	LOSURES (Check all that	apply)		
Eee Lusiusi	nițțal Form (in duplicate	$\boxtimes$	Drawing(s) Formal - 13 sheets		After Allowance Communication to Group	
∑ Fee	Attached -\$950.00		Licensing-related Papers		Appeal Communication to Board of Appeals and Interferences	
Amendmen	nt/Reply		Petition		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)	
· Aft	er Final		Petition to Convert to a Provisional Application		Proprietary Information	
. Aff	idavits/dedaration(s)		Power of Attorney, Revocation Change of Correspondence Addr	ess i	Status Letter	
Extension	of Time Request		Terminal Disclaimer		Other Enclosure(s) (please Identify below):	
Express A	bandonment Request		Request for Refund		PTOL-85 Part B (in duplicate) Letter to Draftsperson (in duplicate)	
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or	Alan A. Limbach, Ro Gray Cary Ware & F					
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Signature	144 22 2003					
Date	July 22, 2003					
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sufficient postage	I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.					
Typed or printed	Kathleen La	Brie		•		
Signature	Signature Yayhilluhatoru Date July 22, 2003					

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22319-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/05 (05-03) U.S. Patent and Ti Wark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## FEE TRANSMITTAL

for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

50.00
50.00

Camplete If Known				
Application Number	09/916,701			
Filing Date	July 26, 2001			
First Named Inventor	Boon siew Ooi			
Examiner Name	Savitri Mulpuri			
Art Unit	2812			
Attorney Docket No.	2103248-990140			

METHOD OF PAYN	MENT (check all that apply)				FE	E CALCULATION	ON (continued)	
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	Fee Description Fee Paid	1254	1,450	2254	725	Extension for reply	within fourth month	
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1003 520 2003 260	Plant filing fee	1402	320	2402	160	Filling a brief in su	pport of an appeal	
1004 750 2004 375	Reissue filing fee	1403	280	2403	140	Request for oral h	earing	
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	n A. Limbach			etian No		19,749	Telephone 650-833-2	433
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SUBMITTED BY				(Complete (	(if applicable)	
Name (Print/Type)	Alan A. Limbach	Registration No. (Attorney/Agent	39,749	Telephone	650-833-2433	
Signature	What. Air			Date	July 22, 2003	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will very depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.





RAY CARY WARE &	FREIDENRICH	4	01 B STREET, SUITE 2000	) SAN DIEGO, CA 92101	CHECK NO.:	541016
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#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231 (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks I through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block I, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notification. maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legisly thick up with any corrections of the Block I)

PIRST NAMED INVENTOR

26379

APPLICATION NO.

7590

04/22/2003

GARY CARY WARE & FREIDENRICH LLP 1755 EMBARCADERO ROAD PALO ALTO, GA 94303-3340

FILING DATE

2000 University Avenue Palo Alto, CA 94303-2248 Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the
United States Postal Service with sufficient postage for first class mail in an
envelope addressed to the Box Issue Fee address above, or being facsimile
transmitted to the USPTO, on the date indicated below.

Kathleen LaBrie	(Depositor's name
Kathlein harril	(Signature
July 22, 2003	(Denta

APPLICATION NO.	FILING DATE	PIRS	t named inventor	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,701	07/26/2001		Boon-Siew Ooi	021040-000800US	9267
TITLE OF INVENTION: M	ETHOD FOR SHIFTING	THE BANDGAP ENEX	GY OF A QUANTUM WELL I	LAYER ·_	·
APPLN, TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$1300	2300	\$1600	07/22/2003
БХАМП	VER.	ART UNIT	CLASS-SUBCLASS		•
MULPURI,	SAVITRI	2812	438-022000		
O'Fee Address indicate PTO/SB/47; Rev 03-02 Number is required.	ence address (or Change of 22) attached, on (or "Fee Address" Indi of more recent) attached.	f Correspondence cation form Use of a Customer	2. For printing on the patent the names of up to 3 register or agents OR, alternatively, single firm (having as a me attorney or agent) and the registered patent attorneys or is listed, no name will be print	ed patent attorneys (2) the name of a ember a registered pagents, if no name	ary Ware & nrich LLP
3. ASSIGNEE NAME AND PLEASE NOTE: Unless a been previously submitted (A) NAME OF ASSIGNE Phosistor Te Incorporated	n assignee is identified b to the USPTO or is being E chnologies,	elow, no assignee data w submitted under separate (B) RE		· · · · · · · · · · · · · · · · · · ·	ate when an assignment ha ignment.
Please check the appropriate		mories (will not be printed			
4a. The following fee(s) are			ment of Fee(s):	al Corporation or other private	group entry U governmen
Sissue Fee		•	eck in the amount of the fee(s) is	s enclosed.	
Publication Fee			nent by credit card. Form PTO-2		
☐ Advance Order - # of C	opies			ed by charge the required for(e), or (enclose an extra copy of this	credit any overpayment, to a form).

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

	•
Authorized Signature)	(Date)
_ lela di Dil	- July 22,2003
NOTE: The Issue Fee and Publication Fee other than the applicant, a registered attornmenterest as shown by the records of the United	if required) will not be accepted from anyone

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commence, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO-Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Attorney Docket No. 2103248-990140

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Boon-Siew Ooi

Group Art Unit: 2812

Serial No.: 09/916,701

Examiner: Savitri Mulpuri

Filed: July 26, 2001

Gray Cary Ware & Freidenrich LLP

2000 University Avenue

East Palo Alto, CA 94303-2248

Title: METHOD FOR SHIFTING THE BANDGAP

ENERGY OF A QUANTUM WELL LAYER

## Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as FIRST CLASS MAIL in an envelope addressed to: MS ISSUE FEE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: July 22, 2003.

SUBMISSION OF FORMAL DRAWINGS

Attn.: Official Draftsperson MS Issue Fee Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

Applicant hereby submits thirteen (13) sheets of formal drawings in the above-identified patent application.

Please charge any fees for the submission of the formal drawings to Gray Cary Ware & Freidenrich LLP, deposit account 07-1896. A duplicate copy of this transmittal is enclosed if charge of additional fees is necessary.

GRAY CARY WARE & FREIDENRICH LLP

Dated July 22, 2003

Alan A. Limbach

Customer Number 26379

Reg. No. 39,749 Attorney for Applicant(s)

Gray Cary\EM\7145355.1 2103248-990140

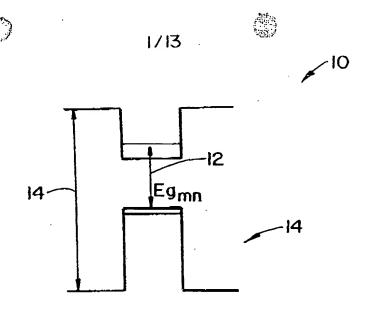


FIG. IA.

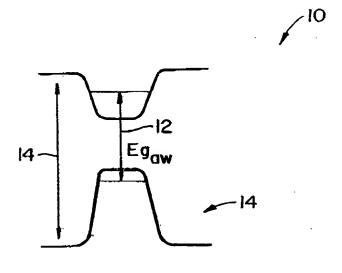


FIG. IB.





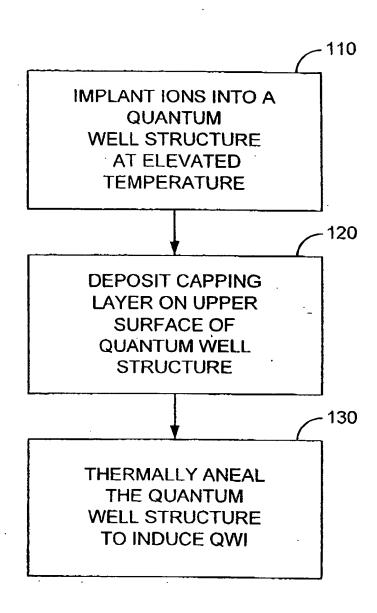


FIG. 2.





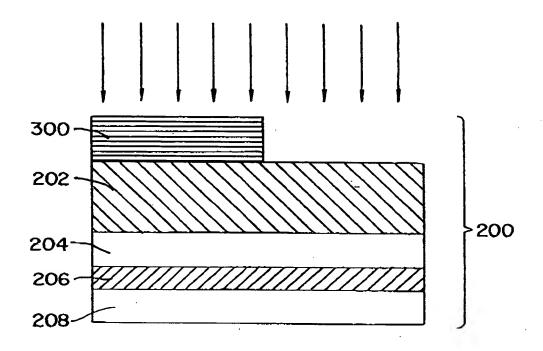


FIG. 3.



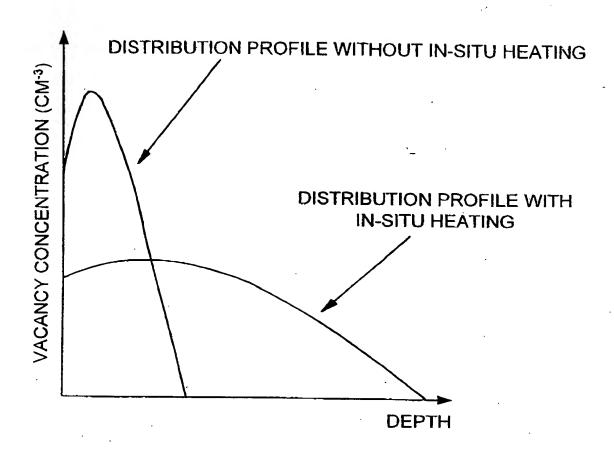


FIG. 4.



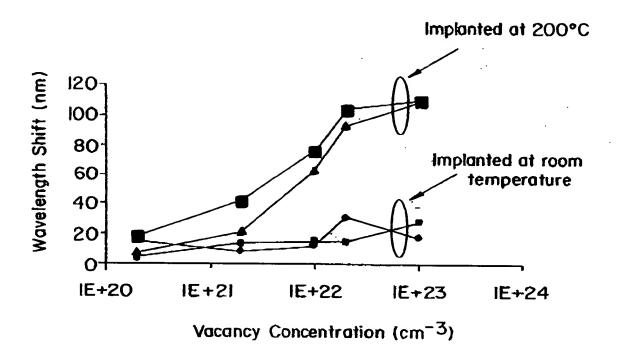


FIG. 5.





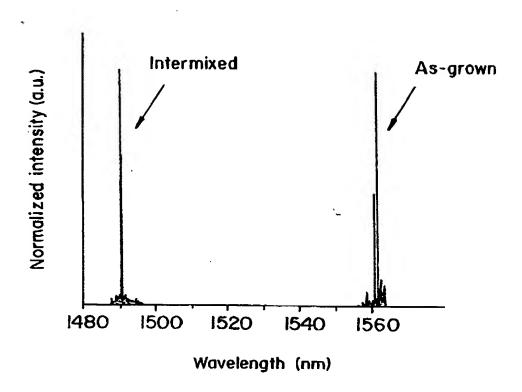


FIG. 6.





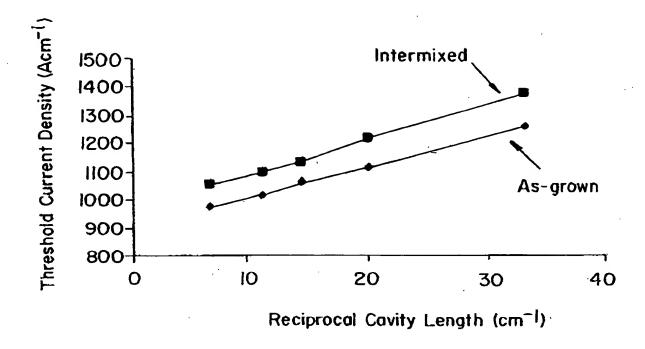


FIG. 7.





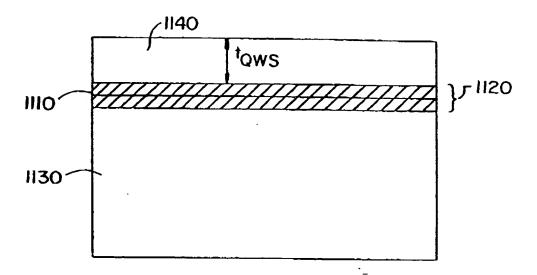


FIG. 8A.

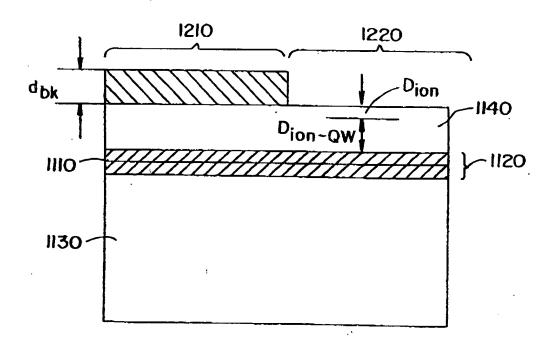
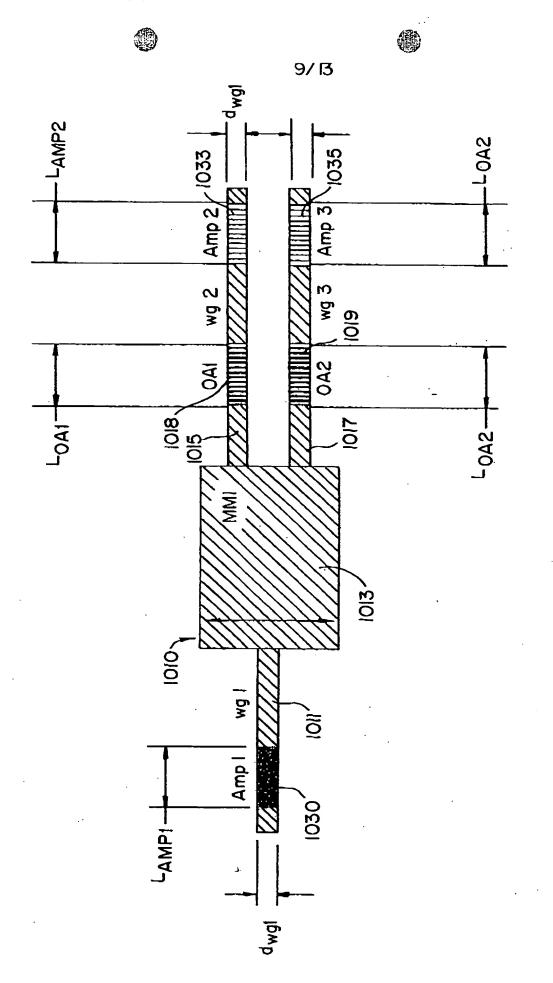


FIG. 88.



F/6.5





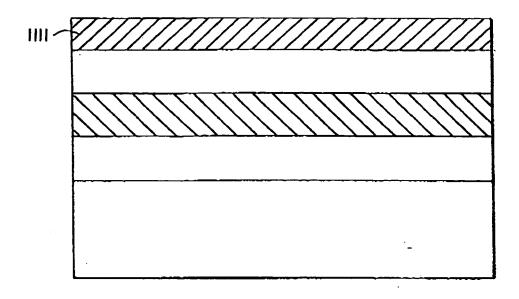


FIG. IOA.

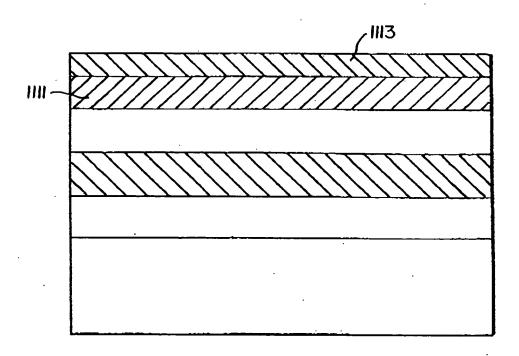
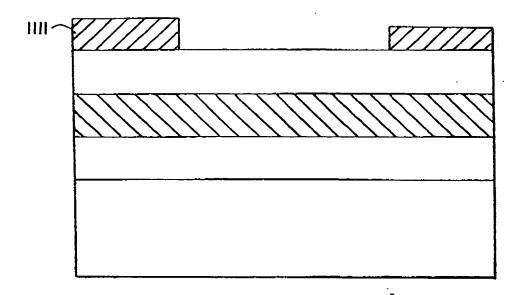


FIG. IOB.







F1G. 10C.

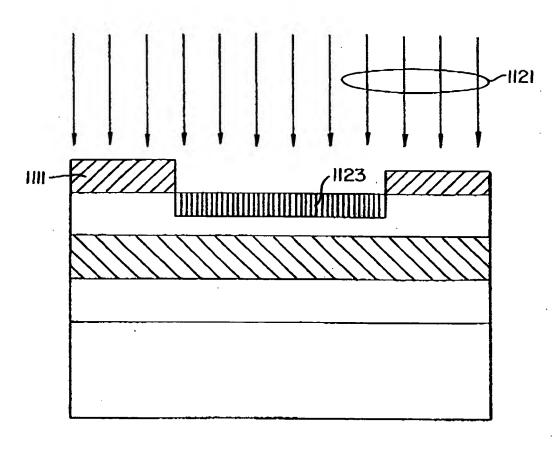


FIG. IOD.





12/13

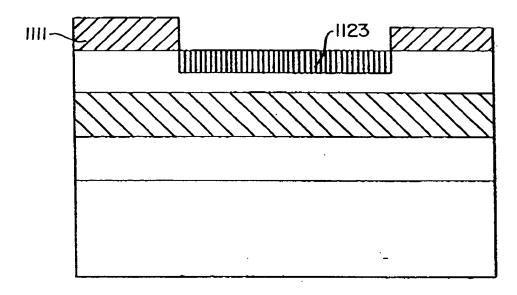


FIG. IOE.

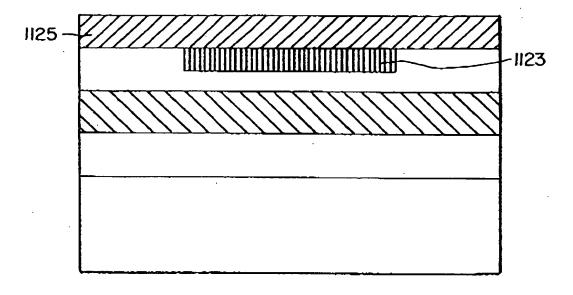


FIG. 10F.





13/13

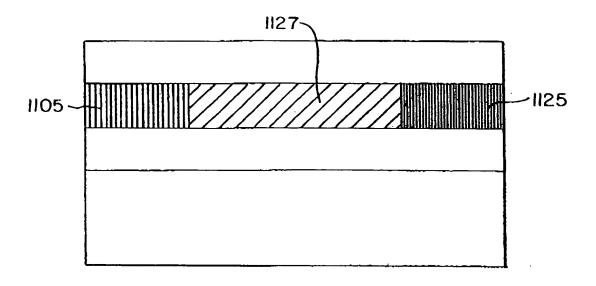


FIG. 10G.

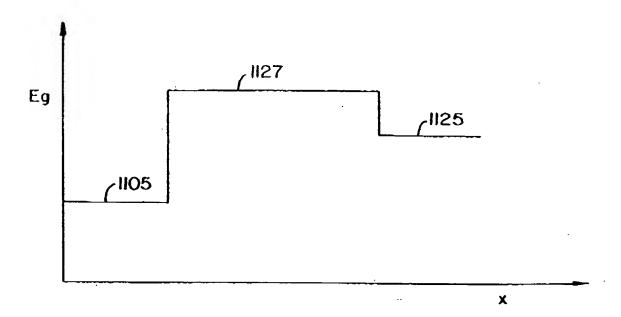


FIG. IOH.

Mail Stop: Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Mailing Date: July 22, 2003 U.S. Serial No.: 09/916,701 Filing Date: July 26, 2001

METHOD FOR SHIFTING THE BANDGAP ENERGY OF A Title:

**QUANTUM WELL LAYER** 

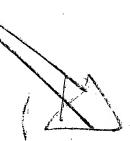
#### Enclosed are:

1) Transmittal Form (in duplicate):

- 2) PTOL 85B Fee Transmittal (in duplicate);
- 3) Fee Transmittal FY 2003 (in duplicate),
- 4) Submission of Formal Drawings Transmittal (in duplicate);
- 5) 13 Sheets of Formal Drawings;
- 5) Check in the amount of \$ 950.00;
  6) Certificate of First Class Mailing; and
- 7) Return Postcard.

2103248-990140 (Phosistor)

22260/AAL/ki



Mail Stop: Issue Fee Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

Mailing Date: July 22, 2003 U.S. Serial No.: 09/916,701 Filing Date: July 26, 2001 Title:

METHOD FOR SHIFTING THE BANDGAP ENERGY OF A QUANTUM WELL LAYER

## Enclosed are:

- 1) Transmittal Form (in duplicate);

- 5) Check in the amount of \$ 950.00;
- 6) Certificate of First Class Mailing; and
- Return Postcard.

2103248-990140 (Phosistor)

1) Transmittal Form (in duplicate);
2) PTOL 85B Fee Transmittal (in duplicate);
3) Fee Transmittal FY 2003 (in duplicate);
4) Submission of Formal Drawings Transmittal (in duplicate)JUL 2 4 2003

22260/AAL/ki

RE: <u>Petition to withdraw holding of abandonment</u> for Patent 09/916,701, "Method for Shifting the Bandgap Energy of A Quantum Well Layer"

### Dear Sir/Madam:

I called the paralegal of your "Office for Petition Examiner" and spoke to Mr. Tom Hawkins (703-305-8380) and he advised me to send you our document with respect to the above matter. Please process the enclosed document (total 26 pages).

We have been awaiting the award of the above patent that had been allowed on March14, 2003. The patent office probably mistakenly abandoned the patent on ground that it did not receive our final set of drawings (See attached Document page 6) while we had actually sent them on time.

A petition to "withdraw holding of abandonment" was sent to the patent office to correct the error. This was sent by our patent lawyer Alan Limbach of Gray Cary on 9 September 03 (page 1 of enclosed Document) with the enclosure of a return postcard and document to show our timely mailing date of 22 July 03 (page 8 of enclosed Document). The letter showed our timely submittal and possible Patent Office error.

We have not heard from the Patent Office since and are eager to see the award of the patent. Please let me know if the patent will be awarded soon. In case there is any question, I can be contacted at 224-588-0958 (cell) or my assistant Dr. Jing Ma at 847-208-3918 at any time. Thanks.

Best regards,

Seng-Tiong Ho

120 Picardy Lane Wheeling, IL 60090 224-588-0958

3 July 04

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

BOON-SIEW OOI et al.

Application No. 09/916,701

Filed: July 26, 2001

METHOD OF SHIFTING THE For:

BANDGAP ENERGY OF A QUANTUM

WELL LAYER

Commissioner for Patents PO Box 1450 Mail Stop: Issue Fee

Alexandria, VA 22313-1450

Group Art Unit: 2812

Examiner: SAVITRI MULPURI

PETITION TO WITHDRAW HOLDING OF ABANDONMENT

2000 University Avenue, East Palo Alto, CA 94303-2248 (650) 833-2000

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to MS Issue Fee, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22213-1450, on September 9, 2003.

WARE & FREIDENRICH

Linda West

Date: 9/9/03

Sir:

Applicants hereby petition to withdraw the holding of abandonment in the present application, as evidenced in the Notice of Abandonment mailed September 2, 2003 (copy submitted herewith).

According to the Notice of Abandonment, the present application was abandoned due to Applicants' alleged failure to timely file new formal drawings as required in the Notice of Allowability, namely that no new formal drawings were received.

Applicants submit that new formal drawings were indeed timely submitted in the present case. Submitted herewith is a true and correct copy of Applicant's response to the Notice of Allowance, which included:

- 1. Transmittal Form
- 2. PTOL 85B Fee Transmittal

- 3. Fee Transmittal.
- 4. Submission of Formal Drawings transmittal.
- 5. 13 Sheets of Formal Drawings.
- 6. Check for \$950.
- 7. Certificate of First Class Mailing
- 8. Return Postcard.

Also submitted herewith is a true and correct copy of the stamped postcard receipt, which is prima facie evidence under MPEP 503 of receipt in the USPTO of all items listed thereon, including the 13 sheets of formal drawings.

Therefore, it is respectfully requested that the abandonment of the present application be withdrawn.

Respectfully submitted,

GRAY CARY WARE & FREIDENRICH

Dated: 547. 9 2003

 $\mathbf{R}\mathbf{v}$ 

Alan A. Limbach Reg. No. 39,749

Attorneys for Applicant(s)

TELEPHONE: (650) 833-2433 (direct line)

TELECOPY: (650) 833-2001

Gray Cary\EM\7149888.1 2103248-990140



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vinginia 22313-1450 www.uspto.gov

1771 (Q. TO) NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
APPLICATION NO.		Boon-Siew Ooi	021040-000800US	9267
09/916,701	07/26/2001	Pooli-Siew Cor		
26379 7	590 09/02/2003			
20373	Y WARE & FREIDE	EXAMINER		
	SITY AVENUE	1114612 222	MULPURI	, SAVITRI
	O, CA 94303-2248			
	•		ART UNIT	PAPER NUMBER
			2812	PH12
		·	DATE MAILED: 09/02/200	3

Please find below and/or attached an Office communication concerning this application or proceeding.

# DOCKETED

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SEP - 8 2003

GRAY OXBY

Mail Stop Issue Fee Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

Docket No. 2103248-990140

Mailed: September 7, U.S. Serial No. 09/916,701 Filed July 26, 2001

### Enclosed are:

Transmittal Cover Sheet;

Petition to Withdraw Holding on Abandonment with Attachments; and

. 3) Return postcard.

. 2103248-990140 Phosistor Technologies

AAL/Imw

Mail Stop Issue Fee Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

Mailed: September 9, 2003 U.S. Serial No. 09/916,701 Filed July 26, 2001

Docket No. 2103248-9901

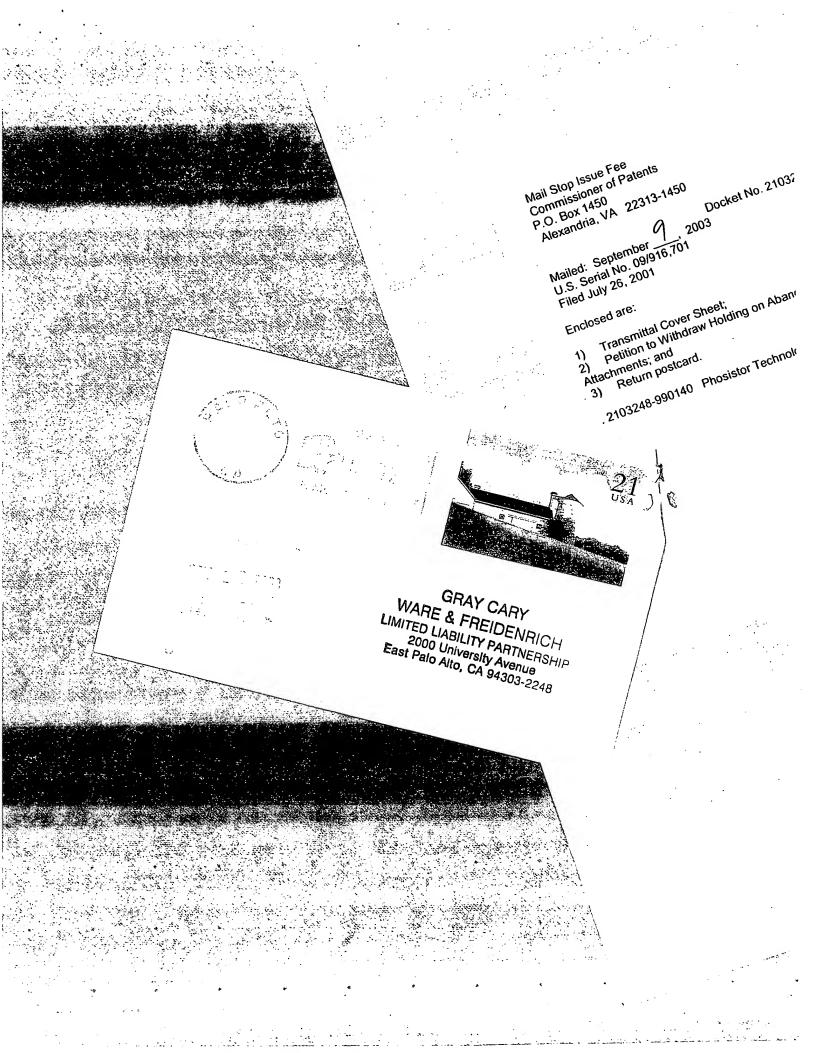
## Enclosed are:

Transmittal Cover Sheet;

Petition to Withdraw Holding on Abandonment Attracts Attachments; and Return postcard. . 3)

. 2103248-990140 Phosistor Technologies

AAL/Imw



PTO/SB/21 (08-00)

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/916,701
Filing Date	July 26, 2001
First Named Inventor	Boon-Siew Ooi et al.
Group Art Unit	2812
Examiner Name	Savitri Mulpuri
Attorney Docket Number	2103248-990140

	ENCLOSURES (check all that apply)					
	Fee Transmittal Form		Assignment Papers (for an Application)		After Allowance Communication to Group	
	Fee attached		Drawing(s)		Appeal Communication to Board of Appeals and Interferences	
	Amendment/Reply		Licensing-related Papers		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)	
	After Final		Petition to Convert to a Provisional Application		Proprietary Information	
	Affidavits/declaration(s)		Power of Attorney, Revocation Change of Correspondence Address		Status Letter	
	Extension of Time Request		Terminal Disclaimer	X	Other Enclosure(s) (please identify below): Petition to Withdraw Holding of	
	Express Abandonment Request		Request for Refund		Abandonment	
	Information Disclosure Statement		CD, Number of CD(s)			
	morniagon biododalo ciatomon	Remarks	s			
	Certified Copy of Priority Document(s)					
	Response to Missing Parts/ Incomplete Application					
	Response to Missing Parts under 37 CFR 1.52 or 1.53				·	
x	Customer Number or Bar Code Label		26379 sed Customer No. or Atlanh har code lahel he	ral		
Depo	The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No.  A duplicate copy of this sheet is enclosed.					
	Respectfully submitted,					
	GRAY CARY WARE & FREIDENRICH LLP					
Date	Dated: September 9, 2003  By: Attorney Name Atan A. Limbach Reg. No. 39,749 Attorneys for Applicant(s)				A. Limbach	

CERTIFICATE OF MAILING						
I hereby certify that this co in an envelope addressed date: September	to: Commissioner of 2003	g deposited with the Patents and Trade	e United States Po marks, Box 1450,	stal Service with a Alexandria, VA o	sufficient postage as first da n this	ss mail
Typed or printed name	Linda Murphy	Veet / /	1		·	
Signature	1 m ch	-M,D	Cest	Date	September 9, 2003	

Gray Cary\EM\7149934.1 2103248-990140

Gray Cary\EM\7149934.1 2103248-990140



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
- ; ; (10) ; ·			EXAMINER
			ART UNIT PAPER NUMBER PH 12

DATE MAILED:

	NOTICE OF ABANDONMENT					
Γhis	s application is abandoned in view of:					
	Applicant's failure to timely file a proper response to the Office letter mailed on					
	A response (with a Certificate of Mailing or Transmission of, which is after the expiration of the period for response (inc	) was received on				
	time ofmonth(s)) which expired on	Stute a proper response to the final				
	A proposed response was received on, but it does not constrejection.					
	(A proper response to a final rejection consists only of: a timely filed amendment condition for allowance; a Notice of Appeal; or the filing of a continuing application	which places the application in n under 37 CFR 1.62 (FWC).				
	No response has been received.					
	Applicant's failure to timely pay the required issue fee within the statutory period of three months from the mailing date of the Notice of Allowance.					
	The issue fee (with a Certificate of Mailing or Transmission of	_) was received on				
	☐ The submitted issue fee of \$ is insufficient. The issue fee required by \$	37 CFR 1.18 is \$				
	☐ The issue fee has not been received.					
	Applicant's failure to timely file new formal drawings as required in the Notice of Allow	vability.				
1	Proposed new formal drawings (with a Certificate of Mailing or Transmission of received on	) were				
	☐ The proposed new formal drawings filedare not accepta	ble.				
	No proposed new formal drawings have been received.					
	The express abandonment under 37 CFR 1.62(g) in favor of the FWC application file	ed on				
	The letter of express abandonment which is signed by the attorney or agent of recorniterest, or all of the applicants.	d, the assignee of the entire				
	37 CFR 1.34(a) upon the filing of a continuing application.					
	The decision by the Board of Patent Appeals and Interferences rendered on	and because the period				
	for seeking court review of the decision has expired and there are no allowed claims	A PANDONMENT				
	The reason(s) below:	CONTACT PERSON IS: TOM HAWKINS				

FORM PTO-1432 (REV. 10-95)

305-8380

Respond to the Notice of Abandonment by one of the following:

### Petition To Withdraw Holding of Abandonment (See MPEP 711.03(c) I) and 37 CFR § 1.181) No fee required

Where an applicant contends that the application is not in fact abandoned (e.g., there is disagreement as to the sufficiency of the reply, or as to controlling dates), a petition under 37 CFR § 1.181(a) requesting withdrawal of the holding of abandonment is the appropriate course of action. Any petition under 37 CFR § 1.181, to withdraw the holding of abandonment not filed within 2 months of the mail date of a Notice of Abandonment may be dismissed as untimely under 37 CFR § 1.181(f).

In order for a petition to be granted, the evidence must be sufficient according to one of the following standards:

- 37 CFR § 1.8(b) Certificate of Mailing
- 37 CFR § 1.10 "Express Mail" mailing
- MPEP 503 Postcard Receipt as Prima Facie Evidence

Petition To Withdraw Holding Of Abandonment should be addressed as follows: Commissioner For Patents, P.O. Box 1450, Mail Stop: Issue Fee, Alexandria, VA

By mail: 22313-1450

703-305-8755 or 703-305-4372 By facsimile:

#### Petition To Withdraw Holding Of Abandonment Based On Failure To Receive Office No fee required (See MPEP 711.03(c) II). Action

Where an applicant contends that the original Notice of Allowance and Issue Fee Due was never received. If adequately supported, the Office may grant the petition and remail the Office action. The showing required establishing non-receipt of an Office communication must include a statement from the practitioner stating that the Office communication was not received and attesting to the fact that a search of the file jacket and docket records indicates that the Office communication was not received. A copy of the docket record where the nonreceived Office would have been entered had it been received and docketed must be attached to and referenced in practitioner's statement.

Petition should be addressed to the Technology Center handling the application as follows: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450

By mail: (Mark attention of a particular office or individual)

Technology Center numbers posted at http://www.uspto.gov/september1/faxnotice.htm By facsimile:

## Petition To Revive An Abandoned Application (See MPEP 711.03(c) III)

Where there is no dispute as to whether an application is abandoned (e.g. the applicant's contentions merely involve the cause of abandonment) a petition under 37 CFR § 1.137 (a) unavoidable or (b) unintentionally (accompanied by the appropriate petition fee) is necessary to revive the abandoned application.

Petitions under 37 CFR § 1.137 should be addressed to the Office of Petitions as follows:

By mail:

Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450

By hand:

Crystal Plaza 4, Rm. 3C23, 2201 Clark Place, Arlington, VA

By facsimile:

703-308-6916

Petition For Revival Of An Application For Patent Abandoned Unavoidably Under 37 CFR § 1.137(a) and Unintentionally Under 37 CFR 1.137(b), forms available at USPTO website - http://www.uspto.gov

Note: Abandonment takes place by operation of law for failure to reply to an Office action or timely pay the issue fee, not by operation of the mailing of a Notice of Abandonment.

PTO/SB/05 (05-03)

09/916,701

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Application Number** 

TRANSMITTAL		Filing Date	July 26, 2001		
FORM		First Named Inventor	Boon Siew Ooi		
(to be used for all correspondence after initial filing)		Art Unit	2812		
,		Examiner	Savitri Mulpuri		
Total Number of Pages in This Submission	21	Attorney Docket Number	2103248-990140		
	ENG	CLOSURES (Check all that	t apply)		
Fee Transmittal Form (in duplicate	$\boxtimes$	Drawing(s) Formal - 13 sheets	After Allowance Communication to Group		
Fee Attached -\$950.00		Licensing-related Papers	Appeal Communication to Board of Appeals and Interferences		
Amendment/Reply		Petition	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)		
After Final		Petition to Convert to a	Proprietary Information		
. Affidavits/declaration(s)		Provisional Application  Power of Attorney, Revocation Change of Correspondence Addi	Status Letter		
Extension of Time Request		Terminal Disclaimer	Other Enclosure(s) (please Identify below):		
Express Abandonment Request		Request for Refund	PTOL-85 Part B (in duplicate) Letter to Draftsperson (in duplicate)		
Information Disclosure Statement		CD, Number of CD(s)	Return Postcard		
be be		The Commissioner is hereby authorized to charge any additional fees which make required, or credit any overpayment to Deposit Account No. 07-1896.  A duplicate copy of this sheet is enclosed.  Customer Number 26379			
SIGI	NATUR	RE OF APPLICANT, ATTOR	RNEY, OR AGENT		
Firm Alan A. Limbach, For Gray Cary Ware &	Reg. No Freide	o. 39,749 enrich LLP			
Signature Wh. 62	2				
Date July 22, 2003					
	CERT	TIFICATE OF TRANSMISSI	ION/MAILING		
I hereby certify that this correspondence is sufficient postage as first class mail in an other date shown below.			or deposited with the United States Postal Service with Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on		
Typed or printed Kathleen L	aBrie				
	leen	hatoril	Date July 22, 2003		
)	•		The second secon		

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete his form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

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U.S. Patent and Ti Mrk Office; U.S. DEPARTMENT OF COMMERCE
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F	EE	TF	(A)	NSMI	T	AL
	fc	r	FY	2003		

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** 

(\$) 950.00

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Application Number	ber 09/916,701	
Filing Date	July 26, 2001	
First Named Inventor	Boon siew Ooi	
Examiner Name	Savitri Mulpuri	
Art Unit	2812	
Attorney Docket No.	2103248-990140	
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transmitted to the USPTO, on the date indicated below. (Depositor's name Kathleen LaBrie (Signature

		July 22,	2003	(Date)
PLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916.701	07/26/2001	Boon-Siew Ooi	021040-000800US	9267

TITLE OF INVENTION: METHOD FOR SHIFTING THE BANDGAP ENERGY OF A QUANTUM WELL LAYER

SAPPIN.   TYPE   SMALL ENT   STATE	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
EXAMINER  ART UNIT  CLASS-SUBCLASS  MULPURI, SAVITRI  2812  438-022000  1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/1/22) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/1/22) attached.  Change of correspondence address (or Change of Correspondence Address findication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached Use of a Customer Number is required.  3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filling an assignment.  (A) NAME OF ASSIGNEE  (B) RESIDENCE: (CITY and STATE OR COUNTRY)  Phosistor Technologies,  Incorporated  Please check the appropriate assignee category or categories (will not be printed on the patent)  CIASS-SUBCLE  (B) RESIDENCE: (CITY and STATE OR COUNTRY)  Pleasanton, California  The following fee(s) are enclosed:  A. The following fee(s) are enclosed:  A. Check in the amount of the fee(s) is enclosed.  CITY and STATE OR COUNTRY (Print or other private group entity)  CITY of the names of up to 3 registered patent attomeys or agents (II) the names of up to 3 registered patent attomeys or agents (II) the names of up to 3 registered patent attomeys or agents (II)  Freidenrich LLP  Freidenrich LTP  Freidenrich LLP  Freidenrich LTP  Freidenrich LTP  Freidenrich LTP  Freidenrich LTP  Freide	<u> </u>	1			\$1600	07/22/2003
MULPURI, SAVITRI  2812  438-022000  1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  U Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  U Fee Address from PTO/SB/122) attached.  U Fee Address indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.  3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.  (A) NAME OF ASSIGNEE  Phosistor Technologies,  Incorporated  Please check the appropriate assignee category or categories (will not be printed on the patent)  O individual Corporation or other private group entity O government by credit card. Form PTO-2038 is attached.	nonprovisional	YËŠ				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  1. Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  1. Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  1. Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  1. Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  1. Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents. If no name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.  3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.  (B) RESIDENCE: (CITY and STATE OR COUNTRY)  Phosistor Technologies,  Incorporated  Please check the appropriate assignee category or categories (will not be printed on the patent)  1. Change of correspondence address (up to 3 registered patent attorneys or agents. If no name is listed, no name will be printed.  2. For printing on the patent attorneys of up to 3 registered patent attorneys or agents. If no name is listed. In on name is listed, no name will be printed.  2. For printing on the patent attorneys or agents. In one name is listed. In one name is listed	EXAM	INER	ART UNIT	CLASS-SUBCLASS		
the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.  3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.  (A) NAME OF ASSIGNEE  (B) RESIDENCE: (CITY and STATE OR COUNTRY)  Phosistor Technologies,  Incorporated  Please check the appropriate assignee category or categories (will not be printed on the patent)  Q individual Acorporation or other private group entity Q government of Fee(s):  Assue Fee  Payment of Fee(s):	MULPURI,	SAVITRI	2812	438-022000		
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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Boon-Siew Ooi

Group Art Unit: 2812

Serial No.: 09/916,701

Examiner: Savitri Mulpuri

Filed: July 26, 2001

Gray Cary Ware & Freidenrich LLP

2000 University Avenue

East Palo Alto, CA 94303-2248

Title: METHOD FOR SHIFTING THE BANDGAP

ENERGY OF A QUANTUM WELL LAYER

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Dear Sir:

Applicant hereby submits thirteen (13) sheets of formal drawings in the above-identified patent application.

Please charge any fees for the submission of the formal drawings to Gray Cary Ware & Freidenrich LLP, deposit account <u>07-1896</u>. A duplicate copy of this transmittal is enclosed if charge of additional fees is necessary.

GRAY CARY WARE & FREIDENRICH LLP

Dated July 22, 2003

Alan A. Limbach

Customer Number

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Attorney for Applicant(s)

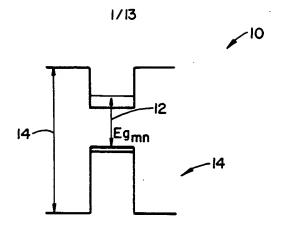


FIG. IA.

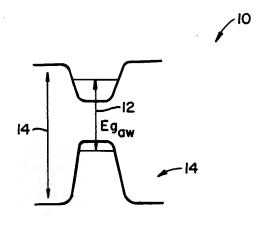


FIG. IB.

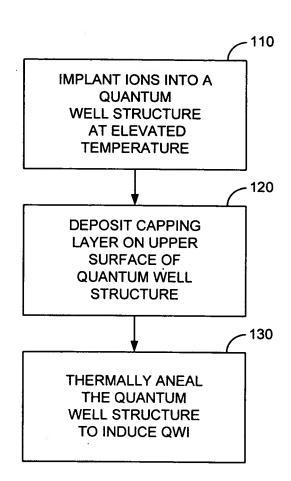


FIG. 2.

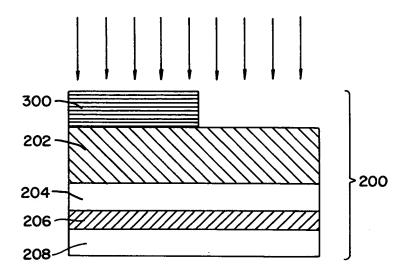


FIG. 3.

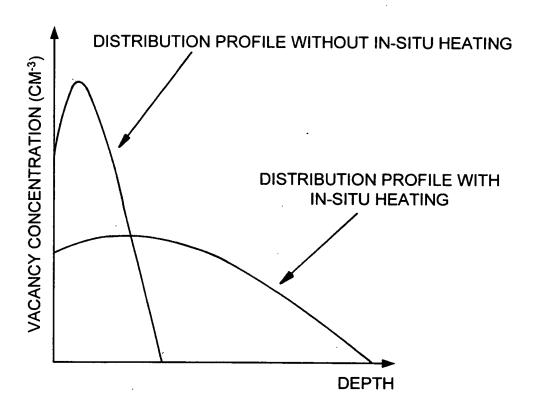


FIG. 4.

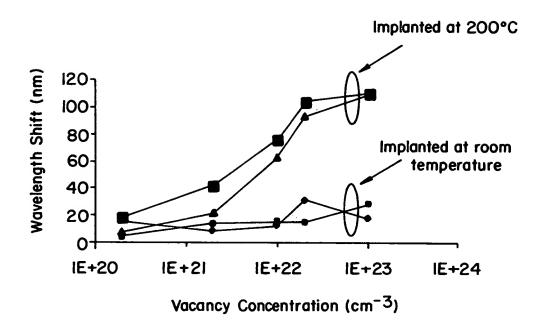


FIG. 5.

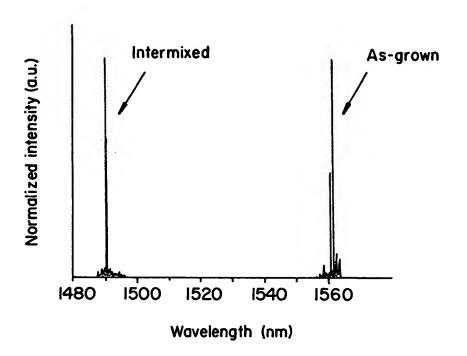


FIG. 6.

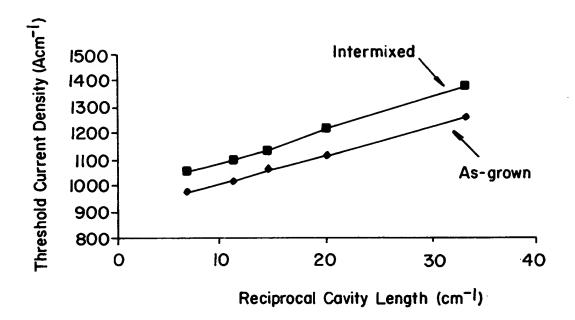


FIG. 7.

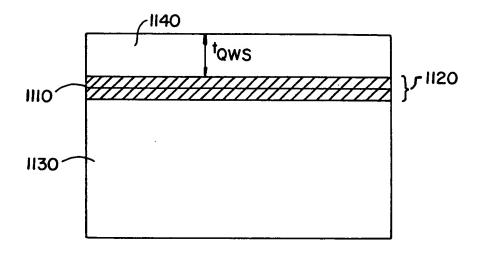


FIG. 8A.

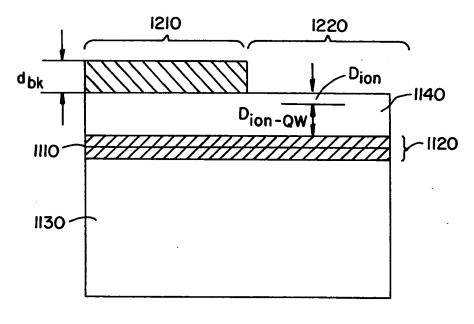
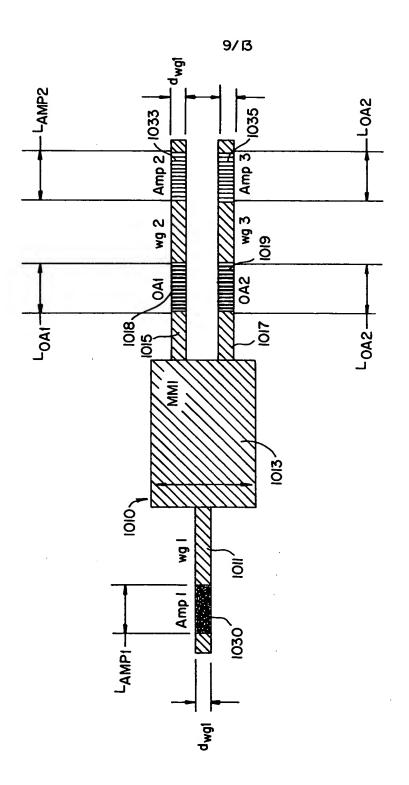


FIG. 8B.



F1G 9.

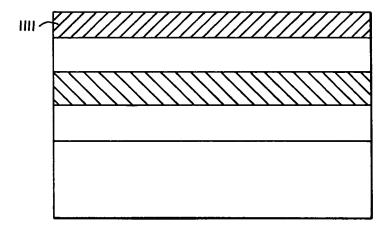


FIG. IOA.

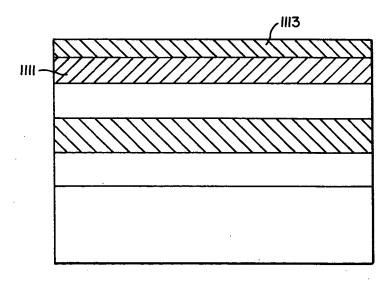


FIG. IOB.

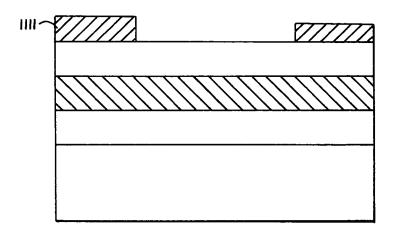


FIG. 10C.

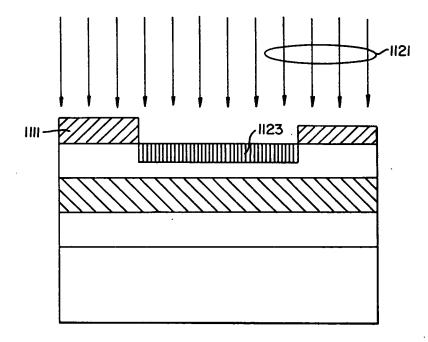


FIG. IOD.

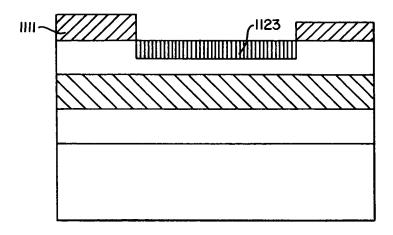


FIG. IOE.

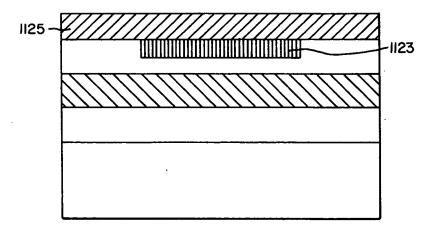


FIG. IOF.

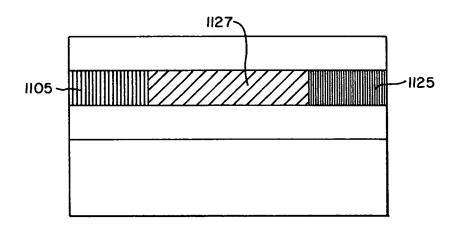


FIG 10G

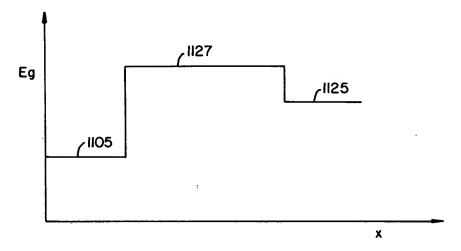


FIG. IOH.